

### Abstract of the Disclosure

A sensor has an emitting device for emitting radiation pulses repeatedly and a receiving device for receiving these pulses. The receiving device includes a converter  
5 such as a photoelectric converter to convert the received radiation pulses into electrical pulses. On the basis of a known waveform characteristic or characteristics of true electrical pulse it is judged if a pulse which appears on the output line of the converter is a true electrical pulse caused by receiving the radiation pulse emitted from the emitting device or a false electrical pulse caused by noise. The result of this judgment is outputted  
10 from an output device. The emitting device may serve to emit the pulses according to a specified bit pattern and the receiving device may serve to compare the pattern of received pulses with a standard bit pattern and to thereby distinguish between true and false electrical pulses.